REMARKS

I. Status of the Application

Claims 1-16 are pending in this application. In the July 2, 2003 office action, the Examiner:

- 1. Rejected claim 1-8 and 10-16 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,047,274 to Johnson et al. (hereinafter "Johnson"); and
- 2. Rejected claim 2 under 35 U.S.C. § 112, second paragraph as allegedly being indefinite;
- 3. Rejected claim 9 under 35 U.S.C. § 103(a) as allegedly being obvious over Johnson in view of U.S. Patent No. 6,021,402 to Takriti (hereinafter "Takriti").

In this response, applicant has added new claims 17-20, and respectfully traverses the rejections of claims 1-16 in view of the following remarks.

II. The Indefiniteness Rejection Should Be Withdrawn

In the July 2, 2003 office action, the Examiner rejected claim 2 as allegedly being indefinite. In particular, the Examiner alleged that the phrase "energy generation units" as it appears in claim 2 lacks an antecedent basis. Applicant respectfully traverses.

In particular, the phrase "energy generation units" in claim 2 is fully characterized as "the energy generation units *selected for operation*" (claim 2, line 8 in Preliminary Amendment)(emphasis added). Prior to that phrase, claim 2 recites "a unit commitment function, the unit commitment function *selecting energy generating units for operation*" (claim 2, lines 3-4)(emphasis added). It is respectfully submitted that above-quoted excerpt

("selecting energy generating units for operation") from lines 3-4 of claim 2 constitutes a legally sufficient antecedent basis for "the energy generation units selected for operation" of line 8 of claim 2.

Accordingly, it is respectfully submitted that claim 2 does *not* fail to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As a consequence, applicant requests withdrawal of the indefiniteness rejection.

III. Claim 1 is Patentable

In the July 2, 2003 office action, the Examiner rejected claim 1 as allegedly being anticipated by Johnson. As will be discussed below in further detail, Johnson fails to disclose each an every element of claim 1.

A. The Invention of Claim 1

Claim 1, as amended in the preliminary amendment filed July 5, 2000, is directed to a energy market system that includes a market user interface and an energy scheduling subsystem. The market user interface exchanges market information with a plurality of market participants. The energy scheduling subsystem that schedules the generation and delivery of energy among market participants in accordance with the market information *and* in accordance with information relating to the energy generation and delivery system.

Thus, among other things, the system includes an energy scheduling subsystem that schedules energy generation and energy delivery in accordance with *two* factors.

The first factor is the market information, for example, bids and offers. The second factor is information relating to the energy generation and delivery system, for example, constraints introduced by the physical characteristics of the energy generation and delivery system.

B. Johnson

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Johnson discloses an auction system for energy suppliers. A bidding moderator receives bids from competing energy suppliers. Each supplier receives competing bids and has the opportunity to adjust its own bid down or up, depending on whether it wants to encourage or discourage additional energy delivery commitments in a particular geographic area or to a particular customer group. (See e.g. Johnson at Abstract).

C. Johnson Does Not Disclose the Claimed Energy Scheduling Subsystem

Johnson fails to disclose, among other things, an energy scheduling subsystem that schedules generation and delivery of energy . . . in accordance with *both* the market information *and* information relating the energy generation and delivery system. At best, Johnson teaches a system for receiving bids and then eventually selects a winning bid or bids for the sale of energy by a provider to a customer. Johnson does not appear to perform scheduling based on anything other than market information (i.e. bids and bid resolution rules). Specifically, Johnson does *not* teach the consideration of information regarding the energy generation and delivery system (i.e. physical characteristics of the energy supply and delivery chain). Mere

settlement of an auction is not tantamount to scheduling energy delivery based on factors that include information relating to the energy generation and delivery system itself, as is recited in claim 1.

1. Analysis of the Examiner's Reasoning for the Rejection

In the July 2, 2003, office action, the Examiner set forth the following reasoning for the rejection of claim 1 over Johnson:

Claims 1-8 and 10-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Johnson et al. . . .

Johnson et al. teach a method and system for energy supply bidding, comprising . . . a market user interface, the market user interface exchanging market information with a plurality of market participants (Abstract; column 3, lines 30-49; column 5, lines 26-44; column 13, lines 24-52);

an energy scheduling subsystem, the energy scheduling subsystem scheduling generation and delivery of energy among market participants in accordance with the market information and in accordance with information relating to the energy generation and delivery system (Abstract; column 3, lines 30-49; column 5, lines 26-44; column 13, lines 24-52).

(July 2, 2003 office action at pp.2-3)

The excerpts of Johnson cited by the Examiner do not provide any teaching or suggestion of an energy scheduling subsystem as claimed. In particular, the Abstract of Johnson appears to teach an auction service that allows energy suppliers to bid for energy sales and then alter their bids based on other bids. The Abstract does not suggest or teach an energy scheduling subsystem. In addition, the cited excerpt of Johnson at column 3 discusses the state of the prior art with regard to the general energy market, but does not teach an energy scheduling system. Similarly, the cited excerpt of Johnson at column 5 discusses the state of the natural gas market, but does not teach an energy scheduling subsystem.

Finally, the cited excerpt at column 13 of Johnson discusses in further detail

the bid communication operations in an energy auction. The "Moderator" solicits and receives the bids on behalf of purchasers, while the "Providers" are the entities that generate the bids. The operations cited therein apply primarily to the bidding "Providers", and do involve operations of an energy scheduling subsystem as claimed.

As a consequence, none of the excerpts of Johnson cited by the Examiner teach an energy scheduling subsystem as claimed.

2. <u>Johnson does not Otherwise Teach the Claimed Invention</u>

Regardless of the Examiner's particular contentions, Johnson does not otherwise teach an energy scheduling subsystem as claimed. By way of example, Figs. 1, 4, 6, 7, 10-16 of Johnson show several variations of an energy auction and billing system. None of these system variations include any element that schedules energy delivery, much less an element that schedules energy delivery based on something *in addition to* bids (i.e. market information). Put another way, no element in Figs. 1, 4, 6, 7, 10-16 constitutes an energy scheduling system that schedules generation and delivery of energy based on market information *and* information relating to the energy and delivery system. Indeed, the Johnson system appears to presume that all bidders can provide energy to all customers within the relevant market.

For all of the foregoing reasons, it is respectfully submitted that Johnson fails to teach or suggest each and every element of claim 1. As a consequence, the rejection of claim 1 is in error and should be withdrawn.

IV. Claim 2

Section 1

Claim 2 also stands rejected as allegedly being anticipated by Johnson. Claim 2 depends from and incorporates all of the limitations of claim 1. Accordingly, for at least the same reasons as those set forth above in connection with claim 1, it is respectfully submitted that the rejection of claim 2 should be withdrawn.

In addition, claim 2 includes a limitation directed to, among other things, a "security analysis function. . . analyzing the energy generation and delivery system under one or more contingency conditions. . ." In the rejection, the Examiner cited the same excerpts of Johnson as those cited in the rejection of claim 1.

Neither those excerpts, nor any other part of Johnson, discloses or suggests "a security analysis function" as claimed. No part of Johnson appears to even suggest the necessity for a solution to a problem that could be solved by "a security analysis function" as claimed. The claimed security analysis function analyzes the operation of the system under one or more contingency conditions. Johnson does not appear to consider that contingency conditions need be addressed, other than to communicate to providers some historical data regarding past consumption by certain customers. Accordingly, Johnson neither teaches nor suggests a security analysis function to analyze operation under such contingency conditions.

As a consequence, for reasons independent of those discussed above in connection with claim 1, it is respectfully submitted that the anticipation rejection of claim 2 is in error and should be withdrawn.

V. <u>Claims 3-6</u>

Claims 3-6 also stand rejected as allegedly being anticipated by Johnson. Claims 3-6 depend from and incorporate all of the limitations of claim 1. Accordingly, for at least the same reasons as those set forth above in connection with claim 1, it is respectfully submitted that the rejection of claims 3-6 should be withdrawn.

VI. Claims 7 and 8

Claims 7 and 8 also stand rejected as allegedly being anticipated by Johnson. Claims 7 and 8 both depend from and incorporate all of the limitations of claim 2. Accordingly, for at least the same reasons as those set forth above in connection with claim 2, it is respectfully submitted that the rejection of claims 7 and 8 should be withdrawn.

VII. Claim 9

Claim 9 stands rejected as allegedly being obvious over Johnson in view of Takriti.

Claim 9 depends from and incorporates all of the limitations of claim 2. Applicant contends that the rejection of claim 9 is based on the erroneous premise that Johnson teaches the invention of claim 2. As a consequence, it is respectfully submitted that the rejection of claim 9 over Johnson in view of Takriti is in error.

In particular, in justifying the combination of Takriti with Johnson, the Examiner stated that "...the teachings of Johnson et al. would perform the invention as claimed by the applicant either with or without including a ramping constraint of a power generation unit". Thus, the Examiner appears to contend that all of the elements of claim 9 except the ramping constraint are taught by Johnson. Applicant respectfully disagrees that Johnson teaches all elements of claim 9 other than the ramping constraint. For example, the teachings of Johnson

fail to include an energy scheduling subsystem and a security analysis function as claimed in the underlying claim 2. Thus, Johnson could not "perform the invention" with or without including a ramping constraint.

Because the reasoning for the Examiner's combination of Takriti and Johnson is based on a erroneous premise, namely that Johnson teaches each and every element of underlying claim 2, it is respectfully submitted that the Examiner has failed to make out a prima facie case of obviousness of claim 9.

VIII. Claim 10 is Patentable

In the July 2, 2003 office action, the Examiner rejected claim 10 as allegedly being anticipated by Johnson. Claim 10 recites an energy transmission rights auction subsystem that provides for the exchange of energy transmission rights in accordance with the market information and in accordance with information relating to the energy generation and delivery system.

Thus, somewhat similar to claim 1, the system includes an auction subsystem that provides for the exchange of energy transmission rights in accordance with two factors. The first factor is the market information. The second factor is information relating to the energy generation and delivery system.

As discussed above in connection with claim 1, Johnson fails to disclose, among other things, a subsystem that schedules generation and delivery of energy . . . in accordance with the market information and in accordance with information relating the energy generation and delivery system. Similarly, with respect to claim 10, Johnson fails to disclose a subsystem that provides for the exchange of energy

transmission rights in accordance with those same two factors.

As a consequence, for reasons similar to those discussed above in connection with claim 1, it is respectfully submitted that the anticipation rejection of claim 10 is in error and should be withdrawn.

IX. Claims 11, 13-15

Claims 11 and 13-15 also stand rejected as allegedly being anticipated by Johnson.

Claims 11 and 13-15 all depend from and incorporate all of the limitations of claim 10.

Accordingly, for at least the same reasons as those set forth above in connection with claim 10, it is respectfully submitted that the rejection of claims 11 and 13-15 should be withdrawn.

X. Claim 12

Claim 12 stands rejected as allegedly being anticipated by Johnson. Claim 12 depends from and incorporates all of the limitations of claim 10. Accordingly, for at least the same reasons as those set forth above in connection with claim 10, it is respectfully submitted that the rejection of claim 12 should be withdrawn.

In addition, claim 12 includes a limitation directed to, among other things, a "security analysis function. . . analyzing the energy generation and delivery system under one or more contingency conditions. . ." As discussed above in connection with claim 2, Johnson fails to disclose or suggest such a security analysis function.

As a consequence, for reasons independent of those discussed above in connection with claim 10, it is respectfully submitted that the anticipation rejection of claim 12 is in error and should be withdrawn.

XI. Claim 16

Claims 16 stands rejected as allegedly being anticipated by Johnson. Claim 16 depends from and incorporates all of the limitations of claim 12. Accordingly, for at least the same reasons as those set forth above in connection with claim 12, it is respectfully submitted that the rejection of claim 16 should be withdrawn.

XII. <u>Claims 17-20</u>

Applicant has added new claims 17-20. Claim 17 includes a limitation directed to a security analysis function in an energy scheduling subsystem. As discussed above in connection with claim 2, the cited art does not teach a security analysis function in an energy scheduling subsystem as claimed. As a consequence, it is respectfully submitted that claim 17 is allowable over the prior art of record.

Claims 18-20 depend from claim 17 and are therefore allowable for at least the same reasons as those set forth above in connection with claim 17.

XIII. Conclusion

For all of the foregoing reasons, it is respectfully submitted the applicant has made a patentable contribution to the art. Favorable reconsideration and allowance of this application is, therefore, respectfully requested.

Respectfully submitted,

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